



PORTLAND **BIKING** GUIDE



**Tips, techniques and
street smarts to make your ride
safer and more rewarding**

Benefits of Bicycling

Saving time Most trips in town are less than two miles. Even at an easy pace you can bike this in about 10 minutes, with no parking hassles. Biking is also a very reliable way to get around. In a car you may find unexpected traffic jams, but on a bike, you can always find another way around and arrive on time.

Saving money The more trips you make by bike, the less money you spend on your car’s gas, oil changes, tune-ups, tire replacement, parking, etc. You can even save money on auto insurance if you drive fewer miles per year. Some families find they can eliminate the need for a second car by using bikes.

Improving health The health benefits you get from just 30 minutes of biking five days a week are significant. You don’t have to ride like a bike racer to see and feel the positive effects of biking.

Helping your community Riding a bike helps reduce air and water pollution, creates safer streets for kids, increases your neighborhood livability, and means less wear and tear on our roads.

Maybe the best reason of all... Even when the weather is dismal, cyclists arrive at work feeling happy. Scientists attribute this to endorphins and increased oxygen flow to the brain. Just watch a child’s face light up when he or she gets on a bike. They get it.

DID YOU KNOW?

The most efficient animal on earth in terms of weight transported over distance for energy expended is a human on a bicycle.

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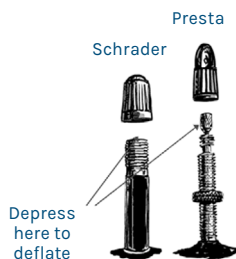
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Preparing Your Bike for Takeoff

A safe bike is essential. This list will ensure a safe and trouble-free ride. If your bike doesn't pass these checks, take it to a bike shop for inspection, questions, or repair.

Tire pressure

Correct tire pressure avoids flats and makes your ride easier. The recommended tire pressure is listed on the side of your tire. Check pressure with a pump with a gauge. If you don't have a gauge, pump your tires to a firmness where it's difficult to push your fingers into the tire. Most tire pumps are adaptable to either type of the valves pictured here.



Tire wear and tear

It is common for tires to become worn after about 1,000 miles of riding. Tires can also get hard and brittle with age. Check the sides of your tires (the sidewalls) for significant cracks. Frequent flats may also be a sign the tread is thin, and the tire needs replacing.

Wheels

A wheel should not wobble when it rotates. A wobbly, "untrue" wheel can rub against the brake pads and cause your brakes to perform poorly. To check, turn your bike upside down and spin the wheels while looking closely at the brake pads. Ensure the gap between the rim and the brake pad stays constant.

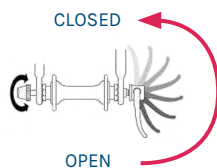
Brakes

Good brakes are essential. When you squeeze your brake levers, they should stop before they touch the handlebars. If they don't, tighten the brake cable. Your brakes may have a cable adjusting barrel that allows you to do this easily. Use an old rag to keep your rims free of dirt and grease, especially when you've been riding during wet weather.

Many brake pads have a "wear line" showing you when they need replacement. Ask your friendly local bike shop. Brake pad replacement should be easy and inexpensive.

Quick release

Many bikes have quick release levers on the wheels. Make sure the levers are solidly locked (snug and curved in towards the bike). Check the quick releases every time you ride.



Chain

Make sure your chain turns smoothly. Lean your bike against a wall or have someone hold it for you. Slowly rotate the pedals backward, checking to make sure the chain turns smoothly. Wipe the grit off your chain with a rag, then apply bike chain oil or lube sparingly to the chain. Wipe off excess with a rag.

Getting Around Safely

Knowing your responsibilities and rights as a cyclist is important to staying safe and feeling confident on your bike. In general, the same traffic rules and regulations for people driving apply to people biking. Read below for a brief summary of the most important laws and traffic considerations pertaining to bicyclists. See the *Community Resources* section at the back of this booklet to find more information on bike safety and the law.

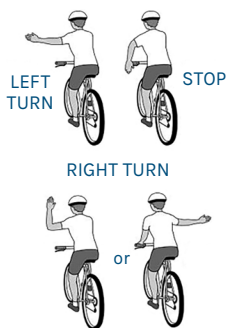
Using bike lanes

Motor vehicles are required to yield to a bicyclist in a bike lane. Buses and cars are not allowed to use bike lanes for parking. Motorized wheelchairs are permitted on bike lanes and paths. Bicyclists may ride outside a designated bike lane when:

- overtaking and passing another bicycle, a vehicle or a pedestrian that is in the bike lane,
- preparing for a left- or right-hand turn, or
- avoiding debris or other hazardous conditions.

Signal your intentions

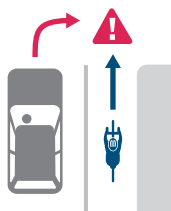
Signaling a turn is required of cyclists at least 100 feet before a turn or stop, except when both hands are necessary to control or operate the bicycle. When approaching a turn, you'll often need both hands for braking and your own safety. However, if you have an available hand, use hand signals to communicate your intentions and foster harmony on the road.



Passing

You may pass a motor vehicle on the right in a bike lane but do so cautiously. People driving may want to turn right at the next street or driveway and neglect to use their turn signal. Stay out of the driver's blind spot at intersections and other places where a driver could turn right.

Outside a bike lane, you're permitted to overtake and pass a motor vehicle on the right if you can "safely make the passage under the existing conditions". Do so with caution. If you have doubts about whether it's safe, don't do it.



BIKING BASICS

Ride with traffic, in a predictable manner
Obey traffic controls (signs, signals, etc.)
Maintain control of your bicycle
Be visible and aware

Riding in the street

If you're riding a bicycle on a road at less than the normal speed of traffic, you're required to ride *"as close as practicable to the curb or edge of roadway"* except when:

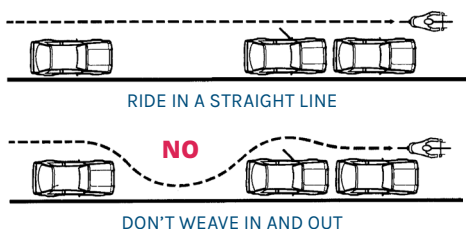
- overtaking or passing another bicycle or vehicle,
- preparing to execute a left turn,
- avoiding hazardous conditions, or
- the lane is not wide enough to allow safe passing by a motor vehicle.

In these cases, a bicyclist may need to "take the lane" to avoid being squeezed against the curb or parked cars by passing traffic.

Maintain a straight line of travel and avoid weaving in and out of the parking lane.

This helps make you more predictable to other road users.

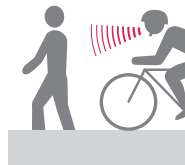
Bicyclists may also ride side-by-side when they don't impede the normal movement of traffic.



Riding on sidewalks and multi-use paths

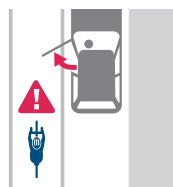
Cyclists must yield to all pedestrians on sidewalks and those marked or unmarked crosswalks. Give a warning with a bell or your voice before overtaking pedestrians from behind. Riding on sidewalks in Portland's downtown core is prohibited. This area is bounded by SW Jefferson, Naito Parkway, NW Hoyt and 13th Ave, with the exception of the Willamette River bridges and ramps and the south Park Blocks. Fines may apply.

Multi-use paths with no cars, such as the Eastbank Esplanade, are very popular and can be crowded with all types of users. Yield to pedestrians, slow down and enjoy the scenery!



Watch for car doors

It is illegal for a motorist to open a car door if it interferes with the movement of traffic, or to leave a door open longer than is necessary to load or unload passengers. When riding next to parked cars, particularly in heavily used parking areas, be alert to car doors opening suddenly in front of you. Scan ahead to see if the driver or passengers are in the car on the street side. Give yourself a buffer. Ride farther away from the "door zone".



Get the green light

Some traffic signals are triggered by electronically charged wires buried in the pavement. When a vehicle stops over the wires, its metal disrupts the current, sending a signal to the traffic signal control box. A car is easily detected by these sensors. A pedestrian can push a button to get the “walk” signal, but a bicycle — with relatively little metal — must be in the right spot to be detected.

The City of Portland Bureau of Transportation marks the location of these sensors to indicate where a bicycle needs to be positioned on the roadway to activate the signal and “get” the green. Put your bike tires on the lines. If a car is already waiting, it will activate the signal for you.

Most but not all of Portland’s traffic signals with sensors are marked for bikes. Look for narrow cut lines in the pavement, usually in a diamond shape, that are filled with tar. You should be able to activate the signal by positioning your bike correctly.

If you find a signal that needs marking or is not working for bikes, call City Street Maintenance at 503-823-1700.

Look for the blue light at certain traffic signals to confirm you’ve been detected. A blue light next to the signal turns on when a bicyclist is detected. It also comes on when a car is detected but providing information for people biking is the primary aim of this device.

Helmets, lights and brakes required

Helmets are mandatory for riders under the age of 16 years unless wearing a helmet “would violate a religious belief or practice of the person.” For those 16 or older, helmets are a really good idea.

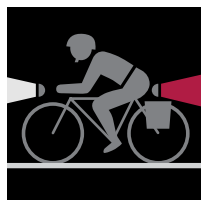
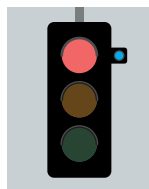
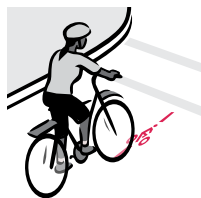
At night and in limited visibility, you’re required to have:

- a white light visible from at least 500 feet and
- a red rear reflector or light visible from at least 600 feet.

Finally, bikes must be equipped with a brake that is strong enough to skid on dry, level, clean pavement.

“Idaho Stop” law

As of January 1, 2020, Oregon’s new “Idaho Stop” law permits riders to legally treat stop signs and flashing red signals as yield signs. Slow down when approaching intersections with stop signs or flashing red signals and proceed only when safe to do so. Riders without the right of way must still yield to traffic. The new law does not apply to standard traffic signals.



Accessorize Your Ride

Small investments can make a big difference in the comfort and convenience of your ride.

Chain, cable and u-lock

There are a variety of different types of locks; your local bike shop will help you select one that meets your needs.



Lights and reflectors

Flashing L.E.D. lights for both the front and rear of your bike are inexpensive and vital safety equipment. They're great for those gray Portland days! If you ride in an area where there are fewer streetlights, a solid beam front light that illuminates the road is a good investment.

Fenders

Even if you don't normally ride in the rain, fenders make riding on wet streets a much better experience. They will keep water and grit from being sprayed onto your feet and legs.

Carrying cargo and kids

You can safely haul a lot more on a bike if and only if you're properly equipped. Here are some ways to carry your cargo:

Backpacks and messenger bags may work for some small loads.



Panniers are bags that attach to a rear bike rack. These are usually waterproof, removable, and allow you to carry more weight.



Baskets and buckets are a less expensive option for carrying more weight. Baskets can attach to the front or rear of your bike. Some are collapsible and others are easily removable to take in the store with you. Plastic "bike buckets" are inexpensive and functional. Go to rei.com/blog/cycle/diy-make-your-own-bucket-bike-panniers for instructions on building one yourself.



Trailers attach to the rear of your bike and are best for carrying large loads, be it children, pets, groceries or whatever else you can think of. Visit a local bike shop or watch the classifieds for new or used trailers.



Specialty bikes and other add-ons allow you to carry more on your bike. There are seats that can be mounted on a bike — usually above the rear wheel — to allow you to carry a child on your bike. Keep in mind that this type of carrier alters your center of gravity and increases the risk of losing balance. Bike tag-alongs or trail-a-bikes are designed for older children and allow the child to pedal along with you. Finally, Dutch-style cargo bikes increase your carrying capacity for children and other cargo.

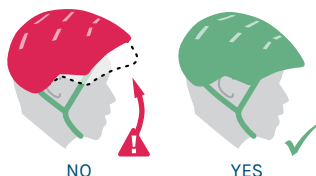
For any of the devices meant for carrying children, check the manufacturer's specifications for how to safely use the product, as well as any age and/or weight limitations.

Accessorize Yourself

Choosing the right clothing will take a bit of experimenting on your part, but here's an overview to get you started.

Helmets

Oregon law requires helmets for children under 16 and we recommend it for everyone else.



Leg bands

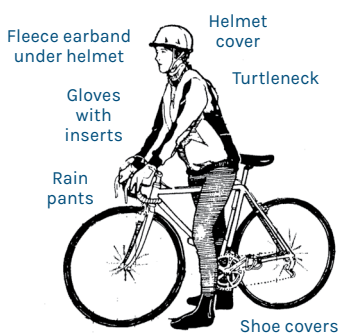
Leg bands are a cheap and easy way to keep your pant leg free of chain grease.

Gloves

Wearing gloves serves two purposes. They protect your hands from the elements and the extra padding can prevent aches and pains in your hands and wrists. Use full-fingered ones in cooler weather and half-fingered in warmer weather.

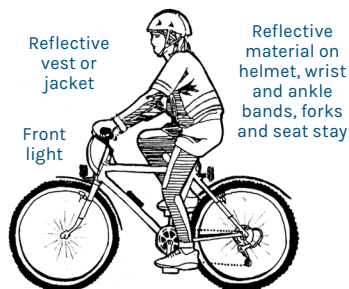
Layers

Layering can be the key to staying comfortable when riding in the wet or cold, and a cheap alternative to performance clothing. Try a base layer that breathes, another layer that provides warmth, and an outer layer that keeps out the wind and rain. You may find that different combinations work at different times of day.



Reflective and bright clothing

Brighter, reflective clothing makes you more visible during dark or low light conditions. Buy clothing with reflective panels and piping or add reflective tape to existing clothing or outerwear. Reflective clothing is not a substitute for lighting.



Rain gear

Water-resistant and water-proof clothing specific to cycling can make year-round riding a breeze. A good rain jacket with a longer flap in the back is a good start. Rain pants, waterproof gloves, and helmet or shoe covers are all great tools to keep you dry.

Shoes and pedals

Wear casual and comfortable shoes with a good traction sole. Toe clips (cages attached to the pedals that your foot slips into) can provide better pedaling efficiency. A more technical alternative is a pair of clipless pedals that require special cleated shoes.



TOE CLIP

Adjusting Your Bike for Comfort

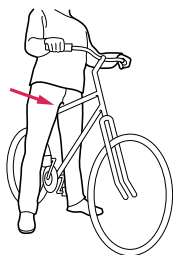
Most bike shops will help you adjust your bike, so it's set for maximum comfort. Here are a few key considerations:

Bike type

Consider what you'll be using your bike for. Mountain bikes, hybrids, and comfort bikes with upright handlebars and wider tires are well suited to shorter trips on city streets. Road bikes with drop handlebars and narrower tires may be a better choice for longer-distance trips. There are also recumbent bikes, folding bikes, tandems, fixies, cargo and electric bikes. Visit a local bike shop or two — they'll be glad you to help you find a ride that's right for you.

Bike size

Most bike shops will help you find the best fitting bike for you. If your bike's frame is too big, it can be hard to adjust the other components for maximum comfort. General guidelines for on-road riding call for about 1-2 inches between the top of the bike frame and your inseam.



Seat types

There are a wide variety of seats (aka saddles) for nearly every type of rider. Seats can be made for comfort or speed and can be gender-specific. Ask a local bike shop for help in selecting the best seat for you.

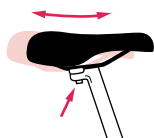
Seat adjustment

The key adjustments to a seat are:

Front/back: a general rule is 1 $\frac{3}{4}$ to 2 $\frac{1}{2}$ inches from the nose of the seat to a vertical line through the bottom bracket.

Angle: start out level, then find what is comfortable.

Height: with your pedal at the bottom of the pedal stroke and your heel on the pedal, your leg should be completely straight (then your leg will be slightly bent when riding normally).

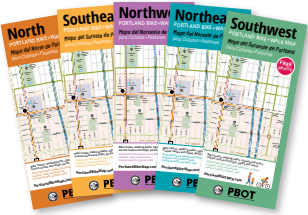


Getting Around Portland

While some trips by bike are simple, a little planning is a good idea for longer, unfamiliar trips.

Pick your route

The route you normally drive may not be the best route by bike. When planning your route, locate your starting point and your destination on a Portland bike map and determine the best bike routes for you. If it's a new route to work or school, you may want to test it out first on a day when you're not in a hurry or must arrive at a certain time.

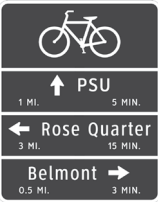


Portland's neighborhood greenways

Many quiet local streets have route signs and markings to help bicyclists find their way. If you prefer cycling on low-traffic streets over bike lanes on busier streets, check out the Citywide or Neighborhood Bike+Walk maps and plan your route using bike facilities marked in green.



SHARROW



BIKE GUIDE SIGN

Bring your bike on public transit

All TriMet buses, MAX light rail trains, the Portland Streetcar and Aerial Tram carry bikes. See the *Bikes and Transit* section for information.

BIKETOWN

Extend your trip with Portland's electric bike share fleet. biketownpdx.com

Bike parking

Portland is decorated with on-street bike racks, and many businesses provide bike parking, so finding somewhere to lock up is never too hard. If you are planning a new commute, scout out in advance the best place to park.

Bike lockers are available for rental throughout downtown and at many transit centers. Some transit centers have "bike and ride" key-card access parking. See the *Community Resources* section for information.

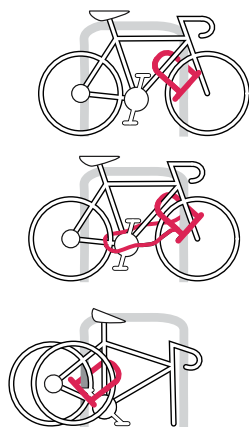


Lock your bike

At a minimum put your lock through the frame and front wheel of your bike. This is especially important if you have a quick release wheel. If you only lock the wheel, the rest of your bicycle can be detached and carried away. Options for locking the frame and both wheels with locks and cables:

- use a u-lock for the front wheel and frame and run a cable lock through the u-lock and rear wheel, and
- removing the front wheel so it can be locked with the rest of the bike.

Take up as much slack or fill up as much space in your lock as possible to prevent and discourage thieves from prying. Remove items from your bike that can be easily removed like quick-release seats, bags, and lights.



Preventing theft

Stolen bikes are sometimes reclaimed, but to increase your chances:

Register your bike on bikeindex.org or project529.com as soon as possible. You will be asked for your name, bike manufacturer, serial number, and component information.

If your bike is stolen, report the theft to the police and give them the bicycle's serial number and description.

Serial numbers are usually located underneath the bottom bracket. If you can't find it, a local bike shop can help you. Record the serial number and put it in a place where you can find it if needed. It's also helpful to take a picture of you with your bike to help show that it's yours.

Bike maintenance on the fly

The most common mechanical problem bicyclists experience is a flat tire. It's surprisingly easy, if a bit grimy, to fix a flat tire. For a how-to primer sheet, go to portland.gov/bike. Once you've learned how, you'll want to impress all your friends with your newfound skill.

ABC QUICK CHECK:

AIR: *Is tire inflation OK? Not too squishy?*

BRAKES: *Working well? Stopping you quickly?*

CHAIN AND CRANKS: *Pedaling smoothly? No squeaking?*

QUICK RELEASES: *Closed and tight?*

CHECK: *Anything loose or rattling on the bike? A quiet bike is a good bike!*

Bikes and Transit

Transit service in the Portland metro area:

TRIMET:

For instructions on carrying your bike on buses and MAX, as well as information on the many TriMet MAX stations with secure bike and ride facilities, go to trimet.org/howtoride/bikes.

PORTLAND STREETCAR AND THE AERIAL TRAM:

Bicycles are allowed on the Streetcar in the low-floor section only, and on the Tram. Bike valet is also offered free to the public at the lower Tram terminal.

OTHER METRO AREA TRANSIT PROVIDERS WHO CARRY BIKES:

The Portland metro area has many bike-friendly transit providers that carry bikes, including:

South Metro Area Rapid Transit (SMART): Wilsonville

area with routes to Salem, Canby and Portland

ridesmart.com

C-Tran: Vancouver area and suburbs with routes to Portland

c-tran.com

Bike locker rentals at C-Tran transit centers:

360-695-0123

NWConnector: Find routes serving St. Helens,

Vernonia, Astoria, Tillamook and more

nworegontransit.org

Sandy Area Metro (SAM): Sandy area with routes

to Estacada and Gresham MAX Transit Center

ci.sandy.or.us

(click on "Sandy Transit" under Departments)

Columbia Gorge Express: Daily routes between Portland,

Multnomah Falls, Cascade Locks, Hood River and connections

to The Dalles

ridecatbus.org/columbia-gorge-express/

AMTRAK – Travel by Train:

Bikes are allowed on some lines and to some destinations including along Amtrak Cascades.

Reservations may be necessary and fees may apply.

Check with Amtrak for details.

amtrakcascades.com

amtrak.com

1-800-872-7245



Cycling Technique

There are lots of riding techniques and insider tips that most people learn bit by bit.

Braking expertise

Get to know your brakes by practicing using them. Rear brakes (usually the right brake lever) are very different from front brakes. The front brake has more stopping power than the rear, but also requires more skill to avoid stopping too abruptly. Spend some time getting the feel. For emergency braking: 1) shift your weight to the rear of the seat and get your torso as low as possible while 2) applying even pressure to both brakes.

Looking behind you

Cyclists need to check traffic behind them when changing lanes or merging, same as drivers. Practice the “shoulder check” in a vacant parking lot until you can do it without swerving. If your neck doesn’t like turning that far to look over your shoulder, try pivoting at the waist and hips a bit as well – the knee on the side you’re turning to can point out a bit.

Mirrors mounted on your helmet or handlebar can be helpful, though they’re not always a complete substitute for shoulder checking.



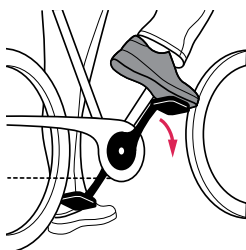
Shifting gears

Use your gears to keep your cadence constant and easy. Downshift to an easier gear when coming to a stop so that when you start up again, you’ll be in an appropriate gear. For going up hills, shift to an easier gear before the pedaling becomes too difficult. A cadence of about 60 to 80 pedal revolutions per minute is a good target for most cyclists.

The fast start

Making a smooth, quick takeoff is deceptively easy:

- Stand over the frame in front of the saddle. Hold the brake levers so the bike won’t roll.
- With your dominant foot, turn the crank backwards until the pedal is forward and high (about 2 o’clock).
- Let go of the brakes and push down on the pedal. The first pedal stroke starts the bike moving and lifts you up to the saddle.
- When the opposite pedal comes to the top position, put your foot on it for the second pedal stroke.



Cornering

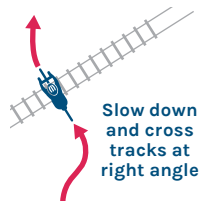
Slow down before you turn. Applying the brakes during a turn can cause you to skid. For more stability while turning, keep the inside pedal up.

Road hazards

Railroad tracks, wet leaves, metal utility covers, thermoplastic road markings and gravel are a just a few things that can pose problems for cyclists. When riding over any of these surfaces, especially when wet, avoid braking and turning. For any rough surface, shift some of the weight off your seat and onto your hands (handlebars) and feet (pedals).

Watch out for tracks

Cross rail tracks at as close to a right angle as possible. Tracks are slippery, especially when wet, so don't alter your course or speed up as you cross. If you can't get a good crossing angle, or if the surface looks too rough, it's OK to walk your bike across. Avoid braking or turning when crossing tracks.



Stay out of the blind spot

Use extreme caution when overtaking a slower motorist while in a bike lane. Make sure you stay out of the driver's blind spot, especially at locations where a driver could turn right across your path, like intersections and driveways.

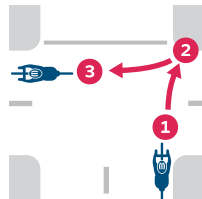
- Ride a little bit ahead of the vehicle so the person driving can see you, or
- Stay far enough back so if the vehicle turns right or stops, you'll be able to stop safely.



The box left turn

Merging across traffic on a busy street to make a left turn can be a very difficult maneuver even for an experienced cyclist. You can cross just like a pedestrian. Here's how to make that turn without the stress:

- 1 Ride through the intersection on the right side of the road.
- 2 Stop near the curb and turn the bike to head in the right direction.
- 3 Proceed with caution, obeying traffic controls, and merge back into traffic when it's safe.



When in doubt, slow down

When biking, it's easy to pull over to the side of the road and assess the situation. Slowing down also gives you more time to react to the unexpected.

INEXPENSIVE WET WEATHER TIPS

When parking outside in wet weather, carry a plastic bag to put over your seat to keep it dry.

Plastic bags keep your feet dry too – just rubber band them on.

Keep a pair of socks and shoes at your workplace, so even if your feet do get wet during the ride, they'll soon be warm and dry.

Community Resources

STREET MAINTENANCE AND TRAFFIC SAFETY

To report problems on city streets, here are some useful numbers:

City Street Maintenance (24 hrs): 503-823-1700

City and County Information and Referral: Dial 3-1-1 or email 311@portlandoregon.gov

BIKE REPAIR AND MAINTENANCE INFORMATION

Shops and organizations offering classes in flat repair and basic bike maintenance:

Bikes for Humanity PDX: 503-496-6941

Bike Gallery: 503-281-9800

Community Cycling Center: 503-287-8786

River City Bicycles: 503-233-5973

North Portland Bike Works: 503-287-1098

Bike Farm: 971-533-7428

BIKE PARKING INFORMATION

Bike locker rental:

Downtown: 503-823-5821

Transit Centers: 503-962-2104, trimet.org/bikes

Bike rack installation requests:

503-823-9863, bikeparking@portlandoregon.gov

BICYCLE SAFETY – RULES OF THE ROAD

The Oregon Department of Transportation (ODOT) provides the Oregon Bicycling Manual online at: oregon.gov/odot/programs/tdd%20documents/oregon-bicyclist-manual.pdf

PORTLAND AND OREGON BICYCLE MAPS

Go to portland.gov/transportation/walking-biking-transit-safety/bike-and-walk-maps-portland to request free Portland bike maps or find other area maps available including:

Beaverton Bicycle Map

Gresham Bicycle Map

Vancouver Bicycle Map

Oregon Coast Bike Route Map

ONLINE TRIP PLANNERS

TriMet bike/bus trip planning: rtp.trimet.org

OTHER USEFUL PORTLAND BIKE WEBSITES:

bikeportland.org

thestreettrust.org

orbike.com

portlandbicyclingclub.com

shift2bikes.org

portland.gov/smarttrips

For more information on bicycling, visit:
portland.gov/bike



Do you have comments or need more information about bicycling in Portland?

Contact us at:

503-865-8637

smartrtrips@portlandoregon.gov

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PBOT
PORTLAND BUREAU OF TRANSPORTATION

Portland Bureau of Transportation
1120 SW Fifth Ave, Suite 1331
Portland, OR 97204

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